

Appl. No. 09/997,501
Amdt. dated October 17, 2005
Reply to Office action of June 15, 2005

REMARKS

This amendment responds to the office action dated June 15, 2005.

The Examiner rejected claims 1-3 and 6-11 under 35 U.S.C. § 103(a) in view of the combination of Chayka, U.S. Patent No. 3,810,016 and Cherry, U.S. Patent No. 4,780,670. Chayka, et al. discloses a wafer probe comprising a thin sheet having a plurality of centrally directed contact fingers. The contact fingers are connected by a tab at their distal ends. Electrical traces are etched onto the sheet using a photolithographic process. The thin sheet is then molded by a stamping tool into a desired three dimensional shape, after which an insulating sheet is placed underneath it. Two such sheets, with insulation, are placed together and the tabs are cut off by a cutting tool. Chayka does not disclose that the sheet include a resistor-capacitor network. The Examiner contends that Chayka may be combined with Cherry, which discloses a probe with a resistor capacitor network.

Independent claim 1 has been amended to include the limitation of “a substantially rigid support comprising a base and a planar circuit board having a resistor-capacitor network, said planar circuit board inclined with respect to said base.” This limitation is supported at p. 11 and has the advantage of spacing the circuit board apart from the device to be tested while still permitting short contact fingers, thereby reducing noise from inductance. In contrast, the support of Chayka, which the Examiner contends is the circuit board onto which signal traces are etched and contact fingers extend in a downward direction after being stamped, is entirely planar and has no base to which the circuit board is inclined. For that reason, as can be seen in FIGS 3, 7, and 10 of Chayka, the contact fingers are excessively long, adding undesirable inductance. (Though Chayka discloses that contact fingers are inclined relative to the planar printed circuit board, the applicant notes that, as claimed, the contact fingers extend from the support, hence cannot be considered a part of the support). Therefore, independent claim 1, as well as its dependent claims 2, 3, and 6-11 patentably distinguish over the cited combination and should therefore be allowable.

In addition, the probe of Chayka requires a complicated fabrication procedure requiring, in addition to a printed circuit board, stamping and cutting tools, in order to shape the probe as

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desired. Chayka also requires that the contact fingers be fabricated as part of the printed circuit board in order to maintain the proper lateral spacing. In contrast, the probe disclosed in the present application may be fabricated in a more flexible and less complicated process where the contact fingers are fabricated separately from the circuit board and soldered into place, after which the tab connecting the distal ends of the fingers are removed.

New independent claim 23 includes the limitation of “a plurality of contact fingers supported by and extending from said support, wherein said contact fingers *are interconnected with said support by a soldered connection*, wherein said plurality of contact fingers are maintained in a predetermined alignment when soldered to said support by a tab proximate the ends of said plurality of contact fingers.” This limitation is not disclosed by the cited prior art, hence claim 23, along with its dependent claims 24-31 should be allowable.

In view of the foregoing amendments and remarks, the applicant respectfully requests reconsideration and allowance of claims 1-3, 6-11, and 23-31.

Respectfully submitted,



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